# **Highlights**

#### Overview

This issue of the *Natural Gas Monthly* presents the most recent estimates of natural gas data from the Energy Information Administration (EIA). Estimates extend through September 1998 for many data series and through June for most price series. Highlights of the September 1998 data contained in this issue are:

- At the end of September 1998, working gas in underground storage is estimated to be 2,921 billion cubic feet, 9 percent more than at the end of September 1997.
- Estimates of natural gas production and net imports from January through September 1998 indicate a slight increase in supply compared with year-ago levels. Dry production is estimated to be less than 1 percent above 1997 and net imports are 2 percent higher.
- Cumulatively for January through September 1998, total end-use consumption of natural gas is estimated to be 14,483 billion cubic feet, 2 percent lower than for the same period of 1997. Consumption declined in the residential, commercial, and industrial sectors.
- After 3 months when the average wellhead price had remained virtually unchanged in a range of \$1.86 to \$1.89 per thousand cubic feet, it fell from May to June 1998 by 9 percent to an estimated \$1.71 per thousand cubic feet.

## Supply

Estimates of natural gas production and net imports through September 1998 indicate a slight increase in supply compared with year-ago levels. Dry gas production in September 1998 is estimated to be 1,561 billion cubic feet or 52 billion cubic feet per day (Table 1). This daily rate is slightly above that of the previous month and 1 percent higher than the daily rate in September 1997. Cumulatively from January through September, dry production in 1998 was less than 1 percent above 1997 (Figure HI1).

Net imports, which are an important component of the supply of natural gas in the United States, are estimated to be 231 billion cubic feet in September 1998 or 7.7 billion cubic feet per day (Table 2). In the previous month they were 7.5 billion cubic feet per day, 3 percent lower. Cumulatively for January through September, net imports are 2 percent higher than they were a year ago.

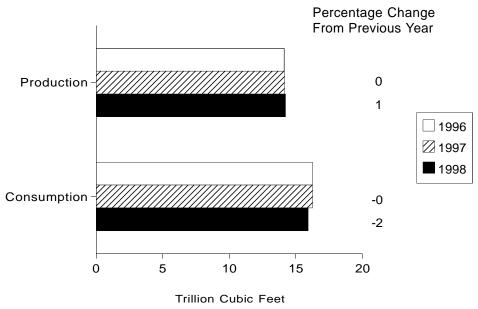
The 1998 refill season began with a rapid rate of injections into underground storage in April and May. Since that time the rate has slowed. Cumulatively from April through September, an estimated 1,733 billion cubic feet have been injected into storage, 3 percent more than a year ago. Working gas in underground storage had ended the 1997-98 heating season (November through March) at 1,184 billion cubic feet, 19 percent more than at the end of the previous heating season. At the end of September 1998, working gas is estimated to be 2,921 billion cubic feet, 9 percent more that at the end of September 1997 (Figure HI2).

## **End-Use Consumption**

Natural gas consumption by end users in September 1998 is estimated to be 1,304 billion cubic feet, about the same as consumption in September one year ago (Table 3). Cumulatively for January through September 1998, end-use consumption is estimated to be 14,483 billion cubic feet, 2 percent lower than for the same period of 1997. The cumulative decline occurred across the residential, commercial, and industrial sectors as respective consumption levels were estimated at 279, 141, and 105 billion cubic feet lower than during the first 9 months of 1997 (Figure HI3).

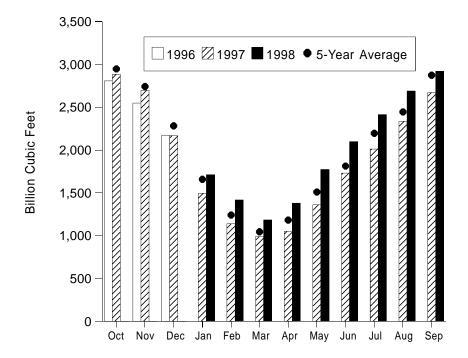
Consumption estimates in the residential and commercial sectors totaled 278 billion cubic feet in September 1998. This level was virtually the same as the volume consumed in September 1997. Cumulatively from January through September, the residential sector showed an 8-percent decline and the commercial sector a 6-percent decline in 1998, compared with consumption for those sectors in 1997. Declines in residential and commercial consumption are attributable to both the warmer-thannormal temperatures during the 1997-98 heating season and the seasonal decline in demand for natural gas for space heating during the summer months.

Figure HI1. Natural Gas Production and Consumption, January-September, 1996-1998



Source: Table 2.

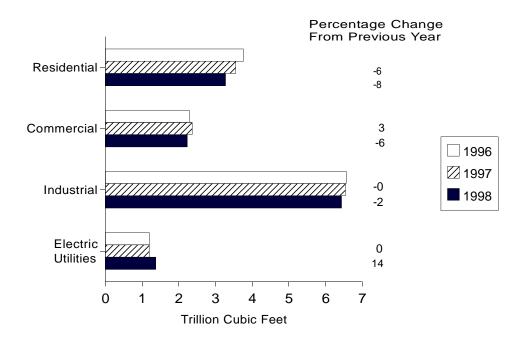
Figure HI2. Working Gas in Underground Storage in the United States, 1996-1998



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1993 to 1997 while the January average is calculated from January levels for 1994 to 1998. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

Figure HI3. Natural Gas Delivered to Consumers, January-September, 1996-1998



Note: The reporting of electric utility deliveries is 3 months behind the reporting of other deliveries. Source: Table 3.

Industrial sector consumption during September 1998 is estimated at 690 billion cubic feet, only 3 billion cubic feet more than consumption in September 1997. Industrial consumers used an estimated 6,431 billion cubic feet of natural gas during the first 9 months of 1998, down 2 percent or 105 billion cubic feet from the first 9 months of 1997.

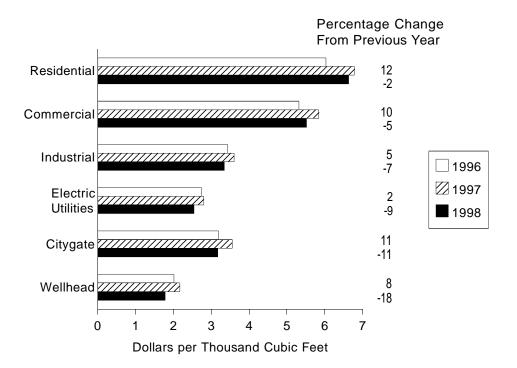
Estimates of natural gas consumption by electric utilities are now available through June 1998. Consumption in this sector typically increases during the summer months when residential and commercial space-heating requirements decline and the demand for air conditioning is greatest. Electric utilities consumed an estimated 379 billion cubic feet in June 1998, 29 percent more than during the previous month and 28 percent more than in June a year ago. More than half of the increase from June 1997 to June 1998 occurred in Texas as very hot weather drove up demand for air conditioning. Cumulatively from January through June, electric utility consumption was 1,361 billion cubic feet, 14 percent higher than during the same period of 1997.

### **Prices**

After 3 months when the average wellhead price was fairly stable in a range of \$1.86 to \$1.89 per thousand cubic feet, it fell from May to June 1998 by 9 percent to an estimated \$1.71 per thousand cubic feet. This was the lowest price since February (Table 4). The decline reflects the effects of low demand due to the generally moderate summer temperatures that were prevalent throughout most parts of the country at that time. The one exception was in the Southwest, specifically Texas, where triple-digit temperatures prevailed.

The estimated price paid for natural gas in the residential sector began its summertime increase in June as prices moved up by 11 percent between May and June to \$8.44 per thousand cubic feet. Cumulatively from January through June 1998, the price averaged \$6.63 per thousand cubic feet, 2 percent less than during the same period in 1997 (Figure HI4). The price for deliveries to commercial consumers decreased by 8 cents per thou-

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-June 1996-1998



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices..

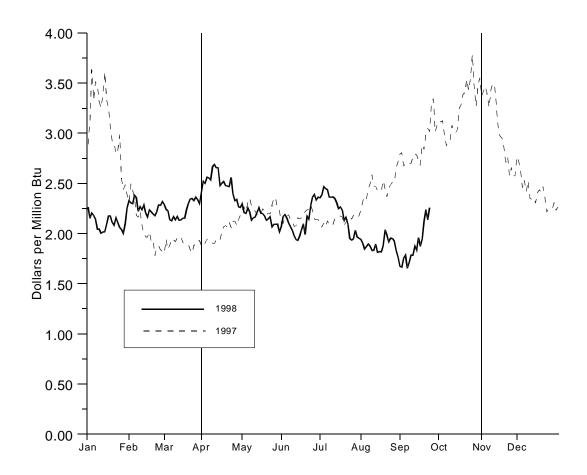
Source: Table 4.

sand cubic feet, or 1 percent, between May and June. Through the first 6 months of the year, it was 5 percent lower than during the same 6-month period of the previous year.

In the industrial sector, the price declined by 19 cents per thousand cubic feet or 6 percent in June. Cumulatively from January through June, the industrial price was 7 percent below the level for the same period in 1997. Electric utility prices are available through May 1998 in this report. Cumulatively from January through May, estimated prices in the electric utility sector are 9 percent lower in 1998 than in 1997—\$2.54 versus \$2.80 per thousand cubic feet.

The September futures contract at the Henry Hub expired on August 27 at \$1.672 per MMBtu, almost \$0.85 less than last year's September contract (\$2.512). The October contract price continued this downward trend, and on September 28 settled at \$2.031 per MMBtu, almost \$1.45 less than last year. The November futures contract is also trading at a level (\$2.30) well below last year's closing price of \$3.266 per MMBtu. A series of tropical storms and hurricane "Georges" have caused several short-lived jumps in the spot price of gas, but the market fundamentals—moderate to low demand, ample supply, and the elevated level of gas in storage—remain constant and continue to contribute to a softening in the price of gas.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the nearby month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

 $Source: Commodity\ Futures\ Trading\ Commission,\ Division\ of\ Economic\ Analysis.$